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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,662	12/22/2003	Kenneth Smith	10013804-1	7608

22879	7590	06/27/2006	

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EXAMINER
IQBAL, NADEEM

ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/743,662	SMITH ET AL.
	Examiner	Art Unit	
	Nadeem Iqbal	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*22 December 2003*</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>*Dec 22, 2003*</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.   Claims 1, 2 & 21 are provisionally rejected on the ground of nonstatutory double

patenting over claim 17 of copending Application No. 2003/0023928. This is a provisional

double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced

copending application and would be covered by any patent granted on that copending application

since the referenced copending application and the instant application are claiming common

subject matter, as follows: With reference to a magnetic random access memory array that

comprises a plurality of magnetic memory cells. The referenced application teaches (claim 17,

lines 1-3), With reference to a controller coupled to MRAM array. The referenced application

teaches (claim 17, lines 7-8). With reference to the controller is configured to communicate with

a host device and controller is configured to perform an error correction function associated with at least one of the plurality of magnetic memory cells. The referenced application teaches (claim 17, lines 4-6).

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonke et al., (U.S. Patent number 5661848).

5.   As per claim 1, Bonke teaches (col. 4, lines 48-50) a controller for a data storage system and a host that includes an input/output interface, controller coupled to the MRAM. Controller comprises communications means including an I/O communications means, the host transmits host commands which the controller receives via the I/O communications means, therefore teaches the limitation pertains to the controller is configured to communicate with a host device. With reference to controller is configured to perform an error correction function associated with at least one of the plurality of memory cells. Bonke teaches (col. 13, lines 25-28).

6.   As per claims 2 & 5, With reference to the error correction module is configured to

perform the error correction function. Bonke teaches at (col. 13, lines 28-25).

7.   As per claims 3 & 4, With reference to the error correction module comprises Reed-

Solomon encoding and decoding devices. Bonke teaches at (col. 14, lines 6-8).

8.   As per claims 6 & 7, With reference to the sparing module is configured to perform the

error correction function. Bonke teaches at (col. 6 lines 23-25, col. 21, lines 62-65).

9.   As per claims 8 & 9, With reference to the error correction in response to a write

operation and to a read operation. Bonke teaches at (col. 13, lines 43-48).

10.   As per claim 10, Bonke substantially teaches the claimed invention as disclosed related to

claim 1 above. He also teaches (col. 4, lines 48-50) a controller for a data storage system and a

host that includes an input/output interface, controller coupled to the MRAM. Controller

comprises communications means including an I/O communications means, the host transmits

host commands which the controller receives via the I/O communications means, therefore

teaches the limitation pertains to the controller is configured to communicate with a host device.

With reference to controller is configured to perform an error correction function associated with

at least one of the plurality of memory cells. Bonke teaches (col. 13, lines 25-28). With reference

to the sparing module is configured to perform the error correction function. Bonke teaches at

(col. 6 lines 23-25, col. 21, lines 62-65).

11.   As per claim 12, With reference to the memory card is coupled to the host device using

the first and second interface. Bonke teaches at (col. 4, lines 58-60).

12.   As per claims 13 & 14, With reference to the error correction module comprises Reed-

Solomon encoding and decoding devices. Bonke teaches at (col. 14, lines 6-8).

13.   As per claims 15-17, With reference to the sparing module is configured to perform the

error correction function. Bonke teaches at (col. 6 lines 23-25, col. 21, lines 62-65).

14.   As per claim 18, Bonke substantially teaches the claimed invention as disclosed related to

claim 1 above. He also teaches (col. 4, lines 48-50) a controller for a data storage system and a

host that includes an input/output interface, controller coupled to the MRAM. Controller

comprises communications means including an I/O communications means, the host transmits

host commands which the controller receives via the I/O communications means, therefore

teaches the limitation pertains to the controller is configured to communicate with a host device.

With reference to controller is configured to perform an error correction function associated with

at least one of the plurality of memory cells. Bonke teaches (col. 13, lines 25-28). With reference

to the sparing module is configured to perform the error correction function. Bonke teaches at

(col. 6 lines 23-25, col. 21, lines 62-65).

15.   As per claims 19 & 20, With reference to the error correction in response to a write

operation and to a read operation. Bonke teaches at (col. 13, lines 43-48).

16.   As per claim 21, Bonke substantially teaches the claimed invention as disclosed related to

claim 1 above. He also teaches (col. 4, lines 48-50) a controller for a data storage system and a

host that includes an input/output interface, controller coupled to the MRAM. Controller

comprises communications means including an I/O communications means, the host transmits

host commands which the controller receives via the I/O communications means, therefore

teaches the limitation pertains to the controller is configured to communicate with a host device.

With reference to controller is configured to perform an error correction function associated with

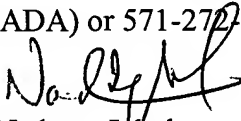at least one of the plurality of memory cells. Bonke teaches (col. 13, lines 25-28).

17. ·   As per claims 22 & 23, With reference to the error correction in response to a write

operation and to a read operation. Bonke teaches at (col. 13, lines 43-48).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nadeem Iqbal whose telephone number is (571)-272-3659. The

examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Scott Baderman can be reached on (571)-272-3644. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nadeem Iqbal
Primary Examiner
Art Unit 2114

NI